

#### LETTER TO THE EDITOR

# Evaluation of a Workshop to Improve Community Involvement in Community-based Participatory Research Efforts

MK Stewart<sup>1</sup>, D Colley<sup>1</sup>, HC Felix<sup>1</sup>, A Huff<sup>2</sup>, B Shelby<sup>3</sup>, E Strickland<sup>4</sup>, B McCabe-Sellers<sup>5</sup>, P Redmond<sup>6</sup>, M Evans<sup>7</sup>, B Baker<sup>8</sup>, G Stephens<sup>8</sup>, ML Bogle<sup>5</sup>

<sup>1</sup>Fay W. Boozman College of Public Health, University of Arkansas for Medical Sciences, Little Rock, AR

<sup>2</sup>Mid-Delta Community Consortium, West Helena, AR

<sup>3</sup>Boys Girls Adults Community Development Center, Marvell, AR

<sup>4</sup>U.S. Department of Agriculture, Agricultural Research Service, Jackson, MS

<sup>5</sup>Delta Obesity Prevention Research Unit, USDA Agricultural Research Service, Little

Rock, AR

<sup>6</sup>Sanders Elementary School Library, Hollandale, MS

<sup>7</sup>Mississippi Delta Community College, Hollandale, MS

<sup>8</sup>formerly with Delta Nutrition Invention Research Initiative, Winnsboro, LA

Published: December 2009

Stewart MK, Colley D, Felix HC, Huff A, Shelby B, Strickland E, McCabe-Sellers B, Redmond P, Evans M, Baker B, Stephens G, Bogle ML

Evaluation of a Workshop to Improve Community Involvement in Community-based Participatory Research Efforts

\*Education for Health\*, Volume 22, issue 3, 2009

Available from: http://www.educationforhealth.net/

#### Dear Editor,

The United States Department of Agriculture's Agricultural Research Service (ARS) established the community-based Delta Nutrition Intervention and Research Initiative (NIRI) to address nutritionally-responsive chronic diseases in the Lower Mississippi River Delta Region of the U.S. (Yadrick et al., 2001). Community participation is considered vital for the success of Delta NIRI's efforts to improve nutritional health in the region. As such, a community-based participatory research (CBPR) approach was adopted (Ndirangu et al., 2007) with community members and leaders assembled in local research committees to plan and implement research projects.

### EDUCATION FOR HEALTH

Change in Learning & Practice.

Open Access e-Journal indexed on Medline



As these committees began planning and implementing nutrition interventions, the need for increasing local knowledge about research, the research process and research ethics was identified by both community members and researchers working with the Delta NIRI. Subsequently, ARS funded the development of a Community Research Workshop to increase community knowledge about health-related research and to decrease negative attitudes and perceptions about research, with the overall goal to increase community participation in Delta NIRI research activities.

A workshop was developed by researchers in partnership with local Workshop Advisory Committees (WAC) comprised of members of the community the workshop would target. The genesis and participatory development of the workshop has been described elsewhere (Stewart et al., 2009). The final workshop curriculum was organized into two "stand alone" modules, which can be delivered separately or together, covering the topics of health research, community participation, research history, research ethics, institutional review boards and the research process. The teaching format includes traditional lectures using presentation slides, discussion prompts and a limited number of interactive exercises such as small group discussions based on locally relevant case studies. In response to community input about the initial draft of the curriculum, most of the participatory teaching strategies were eliminated to reduce the workshop's length. The workshops were delivered in three separate rural communities participating in Delta NIRI research activities over 10 months. Local WACs recruited community members, primarily those currently involved with Delta NIRI research activities, to attend the workshops. There was a total of 74 participants who attended.

The workshop evaluation primarily used pre-post workshop questionnaires to assess changes in knowledge of research, proactive behavior of community members (e.g. asking why and challenging researchers) and attitudes toward, perceptions of and experiences with research. Copies of the questionnaire are available from the authors by request. The evaluation design and instruments were developed in a participatory manner by researchers and Delta NIRI community representatives, and were approved by the University of Arkansas Medical Sciences Institutional Review Board. The questionnaires were administered immediately before and after the workshop. Seventy-four percent (n=55) of the workshop attendees participated in the evaluation, with 37 completing both pre-and post-questionnaires. Two of the three workshops were held in split sessions, so the latter sample is smaller because of attrition between these two sessions. Those not participating in the evaluation were typically those who arrived after the pre-questionnaire was administered or left before the post-questionnaire was administered. Of evaluation participants, most were over 50 years of age (62%), female (95%), African American (89%) and had some college education (71%).

More than three-fourths (79%) of evaluation participants reported they had been a community partner in a research study and about one-half (46%) reported they had been a research subject. The majority of respondents thought it "very important" that people understand research to be a research subject (79%) or to be a community research partner (93%).

Although statistically significant change was not detected for most questions, the trend was for positive change in CBPR-related attitudes and behaviors (see Table 1). In general, after the workshop, a higher percentage of participants reported that the role of community partners in research was "very important," that they would tell the research group about a good idea or provide helpful information and that they were "always comfortable" with the level of their knowledge about the research process. A key finding was a statistically significant 25-percentage point increase in the proportion of participants who reported that as a community partner they "would always confront" an academic research partner if they did not agree with what the academic research partner was saying or doing (p= 0.04).

### EDUCATION FOR HEALTH

Change in Learning & Practice.





Table 1: Pre-post responses on attitudes and behaviors related to Community-based Participatory Research (CBPR)

	Total	
How would you rank the importance of your role as a	Pre	Post
community partner to the research in which you are involved?	(n=37)	(n=37)
Very important	78% (29)	84% (31)
Somewhat important	22% (8)	16% (6)
What best describes what you would do in your role as	Pre	Post
community partner if you had a good idea or information you	(n=37)	(n=37)
thought was relevant or helpful?		
Tell the group about it	92% (34)	97% (36)
Tell individual I trust and ask or hope they express it	8% (3)	3% (1)
What best describes what you would do in your role as a	Pre	Post
community partner if you did not agree with something an	(n=36)	(n=36)
academic research partner was saying or doing?		
Would always confront the person involved	19% (7)	44% (16)
Would confront if I thought it important enough	55% (20)	36% (13)
Reaction would depend on my relationship with the researcher	6% (2)	6% (2)
I would talk to a community partner about it	14% (5)	11% (4)
I would not do anything but keep participating	3% (1)	3% (1)
Other (would always confront & talk to community partner)	3% (1)	
In your role as a community research partner, how comfortable	Pre	Post
are you with your level of knowledge about the research	(n=35)	(n=35)
process?		
Always comfortable	20% (7)	29% (10)
Sometimes comfortable	77% (27)	71% (25)
Never comfortable	3% (1)	
Note: Only surveys with pre- and post-training responses per question are included. Pre-coded		
responses not chosen are not included.		

The majority of evaluation participants were community members who had been active with Delta NIRI, with 75% reporting current involvement in a research project. Although the workshop provided detailed information regarding the ethics and process of human subjects research, CBPR principles and the importance of community participation in research, it is unlikely that these were entirely new concepts for participants already involved in the NIRI. This helps explain the high baseline responses for many of the questions and the non-statistical improvement for most responses. At the same time, the percentage choosing responses associated with more empowered attitudes or behaviors increased in almost all cases after the workshop, suggesting an overall positive impact of the workshop.

These findings are strengthened by anecdotes from community members who co-authored this paper. They shared that the workshop stimulated discussions among some community members about how to assure all community partners' voices are heard when local NIRI decisions are being made. The workshop also contributed to a community's decision to meet separately before the NIRI committee meetings, attended by academics and agency partners, to allow community members the opportunity to discuss things more freely, hear all voices, develop community consensus and speak with a united voice at committee meetings.

Overall, the participatory development approach used to create the workshop (Stewart et al., 2009) resulted in the creation of a mutually-acceptable workshop and co-learning experience. The evaluation results show the workshop stimulated empowering attitudes or behaviors among community members currently participating in research activities. The workshop is anticipated to generate significant improvements in knowledge, attitudes and behaviors related to research participation among individuals who have less past experience with and knowledge of the research process and research ethics. Further testing of the workshop,

## EDUCATION FOR HEALTH

Change in Learning & Practice.





especially among those with limited research experience, is warranted to determine its impact on knowledge about the research process and research ethics and empowered involvement in research projects.

## Acknowledgements

Support for this work was provided by USDA, ARS 6251-53000-004-00D. Henry Nuss, PhD, formerly with U.S. Department of Agriculture, Agriculture Research Service, contributed to the development of this paper.

There were no conflicts of interest in the conduct of this project and no conflicts of interest in the publication of this letter.

#### References

Ndirangu, M., Perkins, H., Yadrick, K., West, J. R., Bogle, M. L., Avis-Williams, A., Santell, R., & Connell, C. (2007). Conducting needs assessments using the comprehensive participatory planning and evaluation model to develop nutrition and physical activity interventions in a rural community in the Mississippi Delta. Progress in Community Health Partnerships, 1(1), 41-48.

Stewart, M. K., Colley, D., Huff, A, Felix, H. C., Shelby B., Strickland, E., Redmond, P., Evans, M., Baker, B., Stephens, G., Nuss, H., & McCabe-Sellers, B. (2009). Participatory development and implementation of a community research workshop: Experiences from a community-based participatory research (CBPR) partnership. Progress in Community Health Partnerships, 3(2), 165-178.

Yadrick, K., Horton, J., Stuff, J., McGee, B., Bogle, M., Davis, L., Forrester, I., Strickland, E., Casey, P.H., Ryan, D., Champagne, C., Mellad, K., Neal, E., & Zaghloul, S. (2001). Perceptions of community nutrition and health needs in the Lower Mississippi Delta: A key informant approach. *Journal of Nutrition Education*, 33, 266-277